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THE REEDY CREEK FARM COOPERATOR



VOL. III No. 3

MARCH 1936

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

The REEDY CREEK FARM COOPERATOR

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Volume III

March 1936

No. 3

WEST VIRGINIA

Abounding in natural resources and scenic beauty; boasting of a sustaining and profitable agriculture; and outstanding in wildlife possibilities, the "Little Mountain State" plays an important role in the life of the nation. Yet I wonder if we realize that approximately 15,000,000 acres of West Virginia have disappeared -- the greatest natural heritage of all. Top-soil has been removed from practically the entire state, to a depth ranging from two to five inches. Not only is this fact significant, but these fifteen million acres represent the best that we have to offer in the way of top-soil. It is safe to say that at least the farming land of the state, approximately 9,000,000 acres, has lost 50% of its top-soil.

Comparatively speaking, this has all been accomplished in a few years. It is not at all difficult to find farmers in the Reedy Creek Project area who say that alarming changes have come about in their fields and they are not productive as they once were. If a change can be detected in one generation, is it not time that something be done to check this wastage of land? Yes, West Virginia can well boast of her resources, her industries, and her possibilities, yet in the final analysis, there is but one foundation upon which any state or nation can exist, and that is the soil. Even though it may be ever so carefully made, no plan of development can have any sort of duration, unless the whole plan is predicated by a program of sound erosion control practices.

--- Ivan C. Owens, Project Manager.

STARTING A FRUIT TREE

Many farmers in Roane County have small home orchards ranging from just a few trees to several acres in size. When given proper care and attention these orchards produce fruit for the farmer and his family, and in some instances extra income from cash sales. Several farmers with the idea of making a better living on the farm, have stated their intention of setting out a few fruit trees this spring. Some suggestions, then, might be of benefit in helping to get the young trees off to a good start.

There are several things to take into consideration in setting out a young tree. For instance, if spring planting is contemplated it should be set out early, after the frost is out of the ground and when the soil is not too wet. By getting the trees in early they have a better chance of establishing themselves before hot, dry weather appears.

The preparation of the hole where the tree is to go is important. The hole should be dug large enough to take care of the root system of the tree without having to bend the roots when placing the tree in the hole. This will insure normal development of the root system. Dig the hole deep enough to allow for a couple shovels of top-soil to be placed in the bottom of the hole, yet allowing for setting the tree an inch or two below its former level while in the nursery. If manure is to be used it preferably should be placed on top of the ground as a mulch around the tree after it is planted.

Careful handling of the young tree is also very important. Under no circumstances should the roots be allowed to dry out as this might result in the death of the tree. The roots can be kept damp during the setting operations by immersing in a tub or barrel containing water or by keeping them covered with wet sacks.

Another important factor deserving consideration is the actual setting of the tree. If the young tree has any branches, it should be set so the branches are headed into the direction of prevailing winds. Or, if the tree is just a whip it could be planted so that it leans slightly in the direction of prevailing winds. After the tree is placed in the hole and some top-soil thrown in on the roots, it is well to lift and shake the tree gently to get the soil settled around the roots. After this the soil should be tramped firmly about the roots as it is thrown in. This will insure the tree being well anchored, with few air spaces in the soil and the roots will be in intimate contact with the soil. It is a good plan to fill in around the tree to about ground level thus allowing for settling of the soil and also helping to hold the tree in position until growth starts. Loose soil or manure should be left on top as a mulch around the young tree and no pruning should be done until after the tree is set.

PROTECT OUR PASTURES

How many farmers would refuse to give help to a work animal if the animal for some reason was "Off feed"? How many would expect him to do his full share of the work until he had recovered and was on "Full feed" again? Any practical farmer knows the answer to the above question, yet I wonder if they all apply the same principle to their pastures.

Ordinarily our growing season for pastures extends from about the first of April to October 15th, depending on the season. During this season the annual plants, such as lespedeza, grow and produce seed. However, of more importance in our pastures are the plants that are capable of living year after year without being re-seeded, such as bluegrass, red top, timothy, orchard grass and others. The grasses just mentioned will not only live year after year under favorable conditions, but bluegrass will actually spread by means of underground stems.

The farmer is interested in following those practices during the growing season that will aid in maintaining and improving the sod, and, at the same time, secure the greatest amount of forage possible. His main problem comes, however, after the grazing season is over in the fall. Plants that are to come through the winter as they should must have a chance to store up a reserve food supply before severe freezing begins. This will permit two important things to take place. First, the plants will store up food in its root systems, thus better enabling them to live over winter and permitting an earlier and more vigorous growth in the spring. Second, a protective covering of vegetation will form over the ground that will aid in holding the soil and in keeping the plants from freezing out.

The next question comes as to when to turn out in the spring. It is ruinous to pastures to try and take advantage of them by grazing during open weather in the winter. It is equally as damaging to turn out too early in the spring. We naturally expect good pastures to green up with the first approach of warm weather. However, we should not take advantage of this effort to get started. Like the work animal, our pastures can best serve us if we allow them to fully recover before expecting them to carry their grazing load. Also by following this method we avoid the severe damage caused by livestock slipping and sliding on pasture sod during soft periods in winter and early spring.

Grass should be about six inches high before turning. It should be kept in mind that our greatest returns will be obtained if the pasture is on full feed before it is expected to carry a full grazing load.

* * * * *

Good pasture sod helps to keep the soil at home, and soak up the water.

WILDLIFE ENCOURAGEMENT ON THE SPENCER PROJECT

Efforts to encourage and increase wildlife on the Spencer Project were instituted in Spring 1935, when 200 acres on 147 different farms were seeded to lespedeza and other plants. Subsequent investigations have conclusively proven the value of this work. An examination of the crops of quail killed during the last hunting season disclosed the fact that lespedeza seed composes a great part of the fall and winter diet of those birds.

Unfortunately, even a relatively light snowfall will cover the plants, making it extremely difficult for the birds to locate food. In order to cope with weather conditions such as those experienced this winter, and also to supplement the available natural food supply, the Soil Conservation Service recently inaugurated a wildlife feeding campaign. The results of this work have more than paid for the effort involved.

During a period of about four weeks, there were erected, with the help of the Soil Conservation Service cooperators, 117 bird feeding shelters. A number of these shelters have been visited and all show signs of being actively used by small birds. In addition, there have been a number of reports of the shelters being used by quail. In addition to the bird feeding shelters, there have also been 66 squirrel feeders erected.

Woodlands on the Roody Creek Project seriously lack the smaller species of trees and shrubs that are so important in the providing of wildlife food and cover. In order to at least partially offset this condition there are to be established during the coming planting season a number of food and cover plantings. It is likely that the majority of these plantings will be in connection with gully control work. Unfortunately, the variety as well as the number of plants available is limited, and, while this will handicap the work to a certain extent, still it is felt that the resultant better food and cover conditions will be well worth the effort.

TREES AND SHRUBS SUITABLE FOR WILDLIFE FOOD AND COVER

Black Haw	Persimmon
Hawthorns	Pawpaw
Wild Grape	Black Gum
Bittersweet	Wild Cherry
Huckleberry	Choke Cherry
Virginia Creeper	Wild Crabapple
Holly	Beech
Elderberry	All Oaks
Dogwood	Hickory
Spice-bush	Juneberry
Chokeberry	Walnut
Wild Plum	Mulberry
Wahoo	Pine (for cover only)

FARM WOODLOT DEMONSTRATION FIELD DAYS

The Soil Conservation Service, in cooperation with the Agricultural Extension Service, is planning a series of farm woodlot demonstration field days, the purpose of which is to demonstrate and discuss timber marking and cutting measurements of standing timber, and other subjects relative to the proper and practical methods of farm woodlot management. These meetings are to be open to all those who care to attend, and a cordial invitation is extended to all. The meetings are scheduled as follows:

March 10th, 1:30 P. M., on the George Holswade farm about two miles south of Spencer, along Route 14. The program for this meeting includes wood chopping, cross-cut sawing and timber marking contests. Prizes for these contests have been offered as follows:

Cross-cut sawing contest - two double-bit axes, donated by Hardman Supply Company and F. F. McIntosh & Son.

Wood chopping contest - one pair of overalls, donated by Spencer Department Store.

Timber marking contest - one work shirt, donated by Thabet Department Store.

The second meeting of the series will be held at 1:30 P. M. on March 11th, on the C. A. Daniels farm, three miles north of Elizabeth along Route 14. The program for this meeting will be practically the same as the program on the Holswade farm, Mr. Paul M. Hess acting as Chairman. Prizes for the various contests are as follows:

Two double-bit axes, donated by the G. W. Roberts Store and Thorn & Andrick.

One pair of overalls, donated by I. P. Thorn.

One work shirt, donated by interested individuals.

The third meeting will be held on the H. C. Parrish, C. A. Parrish and B. D. Shatto farm, located on Route 5, about six miles east of Ripley. This meeting is to be held at 1:30 P. M., March 12th. The program will be similar to the other two meetings, Mr. D. L. Cottrill acting as Chairman. Prizes for the various contests will consist of four axes.

PROGRAM

Meet along Route 14, at George Holswade farm March 10th, at 1:30 P. M. Chairman, Mr. H. L. Riggle.

Wood chopping contest; Explanation and Discussion of Timber Marking by Mr. R. B. Smith, Extension Forester; Explanation and Discussion of Utilization of Materials Removed by Farm Woodlot Improvement, Mr. S. L. Tinsley, Soil Conservation Service; Discussion of Wildlife Encouragement as Related to Farm Woodlot Management, Mr. L. R. Albright, Soil Conservation Service; Timber marking contest; Cross-cut sawing contest; Adjournment at 4:30 P. M.

Contest rules found on page 12.

FARM ROADS

When the engineers made the gully control survey of farms they determined, as nearly as possible, causes for the existence of many of these gullies. In tabulating such data we find that approximately one out of every seven gullies on our cooperator's farms has been caused by poor judgment in placement and usage of farm haul roads. Almost every average-size farm in West Virginia has several large deep gullies which represent the present site of a former road.

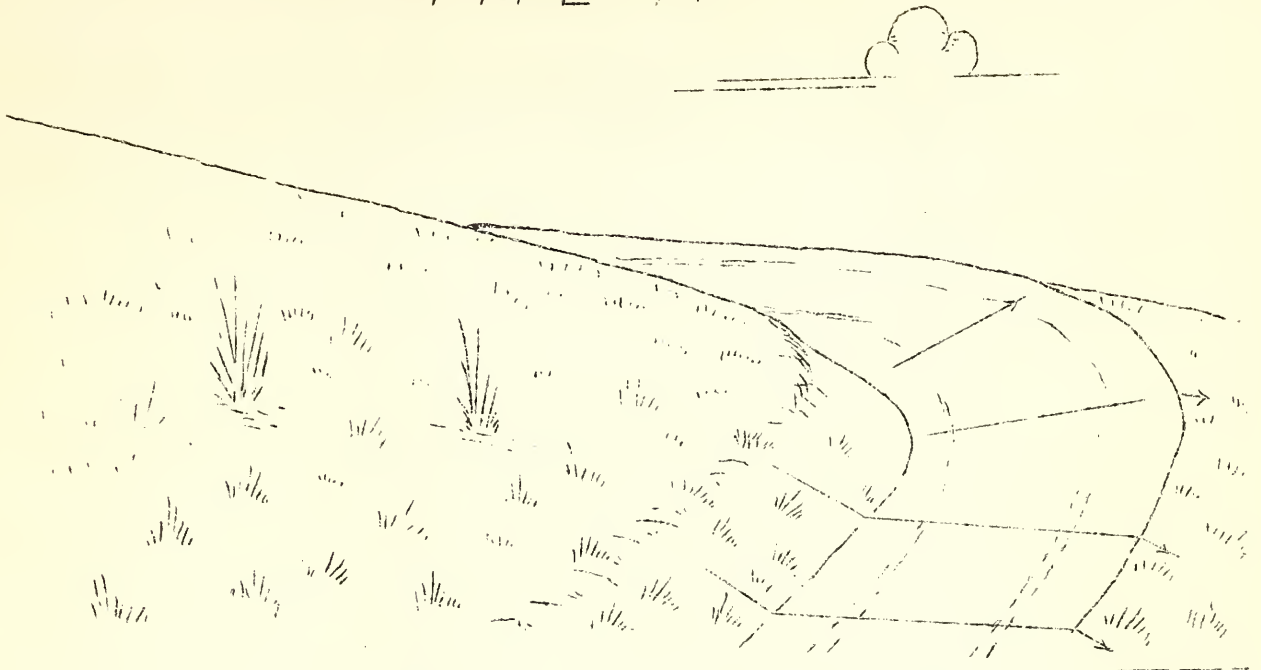
Practice has been to use a road until the mules could no longer follow it or until a wagon or two had fallen into the gullied ruts. Another road was then started alongside the old until it too had to be abandoned. Before very long the original tracks grew into broad, deep, gullied areas that were a danger to livestock and that kept crowding into adjoining land. The trouble with such gullies is that they are very much like large stones rolling down a steep hillside -- they start slowly but they surely "gather steam" as they go. A person might have a chance to keep a boulder from rolling down a hill by blocking it before it starts moving. There would be little chance of stopping it once it "gets going".

If we keep gullies from getting started, we have practically won the fight. Just a little care in placing those haul roads; just a little care in how we use them will prevent the gullies from getting started. Where we see a rut cutting down we should fill it that season. If gullies persist in coming in, no matter how hard we work to keep them out, then it may be necessary to change the location of the road or to rebuild it.

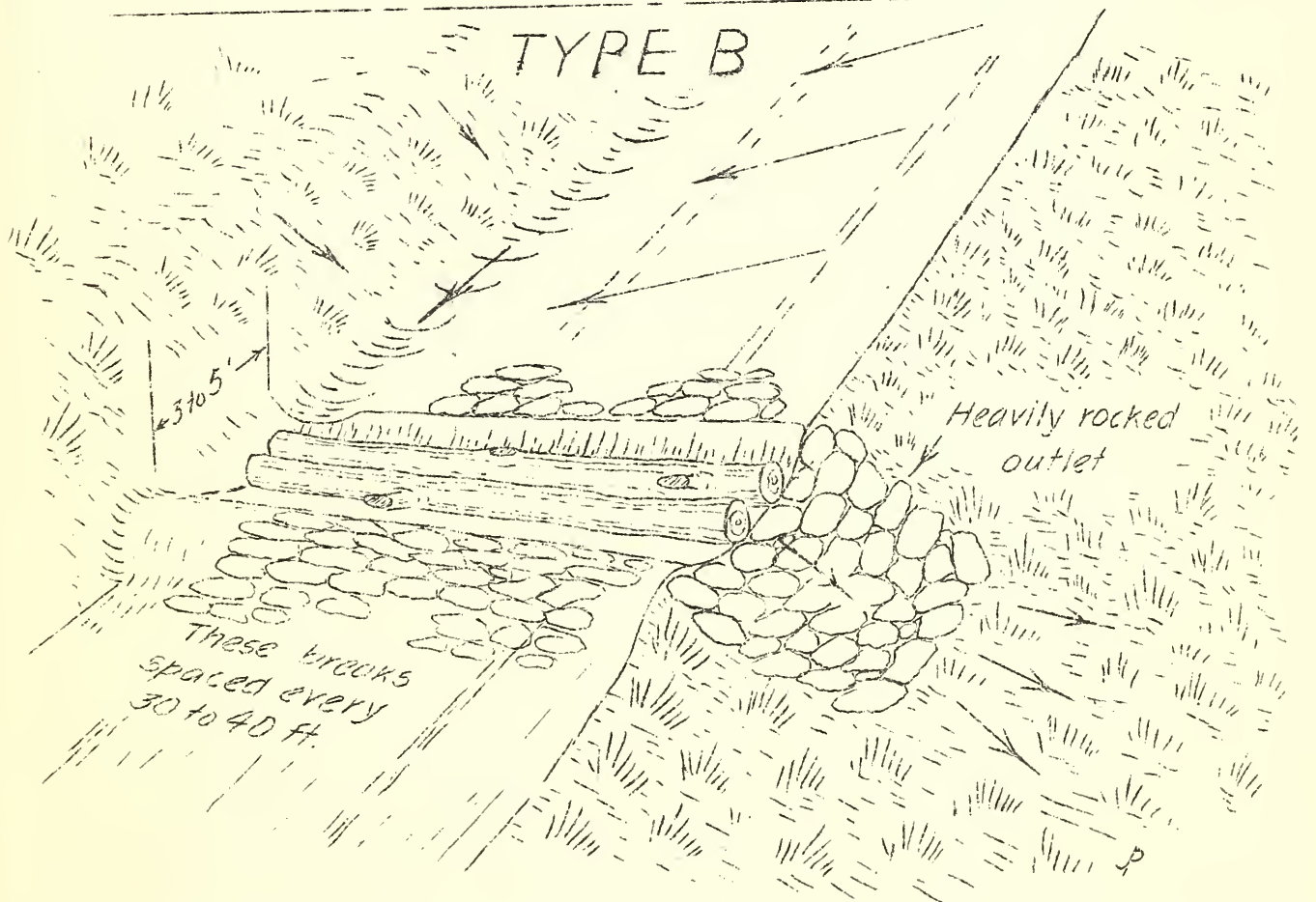
The secret of good road-building is adequate drainage. That principle applies to a small farm road as well as to a concrete pavement. A little foresight in placing cross-drains and in providing for surface water will ordinarily be enough. Water should never be allowed to collect in large quantities so that it will follow down the wagon tracks and dig them out. Cross-drains should be placed to prevent this. If they are well-spaced they will handle the average rain.

Below is shown two methods of constructing farm roads. Either one will assist materially in preventing excessive future gullying. Type A should be used only where there is little danger from sliding. This type of construction allows surface water to drain off equally at all points and needs no ditches except at points where side-runs must be crossed. Type B construction requires that cross-drains be spaced close enough so that no large amount of water has a chance to collect before it is taken away by a cross-ditch. Cross-ditches should be kept free from dirt. They may be filled with logs or rock which makes crossing easier and yet doesn't prevent water from running through. It is important that the outlets to these cross-ditches be protected so that they will not cut back into the road.

TYPE A



TYPE B



FARM HAUL ROADS

CO-ORDINATING FORESTRY AND WILDLIFE

For many years the forestry profession has been dormant so far as the encouragement of wildlife is concerned. During the past two years, however, there has been a rapidly growing feeling that possibly, contrary to former opinions, forestry and wildlife are not incompatible, but on the other hand, they are so closely related that the welfare and progress of one is essential to the welfare and progress of the other. To this end the Soil Conservation Service has included as part of its program the development and encouragement of all forms of wildlife.

Possibly the greatest error of forest practice that has occurred in the past was the tendency, in connection with timber stand improvement and woodlot development, to remove all so-called "weed species." These included wild grape, dogwood, hawthorn, sassafras, and other berry and nut bearing trees and shrubs. Since these species produce no timber or other salable products, they were considered as worthless weeds to be eliminated from the forest community. The result of this practice was an open forest floor, which furnished very little material suitable for wildlife food and cover. In fact, in many instances, final stands were almost park-like in appearance. Fortunately the forestry profession now recognizes the fact that these older practices are no longer practical or desirable, and there are many new thoughts that should be of interest to the progressive farmer because of their bearing on the management of his farm woodlot.

Under no circumstances should a woodlot, as a result of improvement cutting, be made to look like a park. This unwise practice results in removal of food producing shrubs as well as small trees of good species. A good rule to follow is to "cut nothing unless some good will result from that cutting". This, of course, results in the preservation of all the important berry-bearing shrubs. The so-called weed-species such as dogwood, sassafras, gum, etc., should be removed only when present in large quantities, and even then it is recommended that only a portion of the total amount be removed. Grape vines, unless found on valuable trees of good form, need not be cut. The proper improvement cutting removes enough trees to permit a fair amount of light to filter through to the forest floor. This not only encourages the reproduction of an understory, but also encourages growth of the remaining trees.

Brush, unless it constitutes too great a fire hazard because of location, should not be burned. Burning not only destroys organic material that should be returned to the soil, but also removes a valuable source of wildlife cover. The most effective means of disposal is by means of small, scattered piles around stumps, rotting logs, etc., where it furnishes cover and protection

until it decays and eventually returns to the soil.

Forest plantings, in contrast to the older methods used, should not be established as pure stands. This is particularly important if coniferous plantings are being considered. While pure coniferous stands of trees furnish excellent wildlife cover and protection, they furnish little or no food, and wildlife will therefore penetrate to no great depth. These solid plantings, especially if erosion control is the primary objective, should be broken up by means of scattered groups of food producing tree and shrubs. The resulting mixed stand will be just as effective so far as erosion control is concerned, and will be far more favorable to wildlife. In addition, a mixed conifer and hardwood leaf litter tends to create better soil conditions, and has a greater capacity to absorb moisture.

This co-ordination of forestry and wildlife exists not only in the fields of woodlot improvement and planting, but also in forest protection, forest recreation, and all other phases of forest practice. The spirit of co-operation now existing between foresters and those interested in wildlife and game management can have only one result --- a rapid approach to the ideal forest community composed of the proper variety of trees, shrubs, plants, birds, and animals required to maintain the balance that Nature originally intended to be maintained.

Note: The above article should in no way be taken as a criticism of past woodlot management practiced by S. C. S., but represents the new thought of taking care of our woods with reference to the wildlife.

SAVE GAME FOOD AND COVER



PREVENT FIRES

LOOKING BACK

What's that you say thar stranger?
 I didn't quite understand.
 You say your've come to this section
 To help us rebuild our land?

Well, I reckon you've got a big job sir,
 And I doubt very much if you'll stick;
 For the best of the land, around here, "By gosh,"
 Has been carried away by the crick.

'Twas down in the Reedy Creek valley
 In the year eighteen hundred and nine,
 That my grandpappy started in clearing
 The land of its oak, beech and pine.

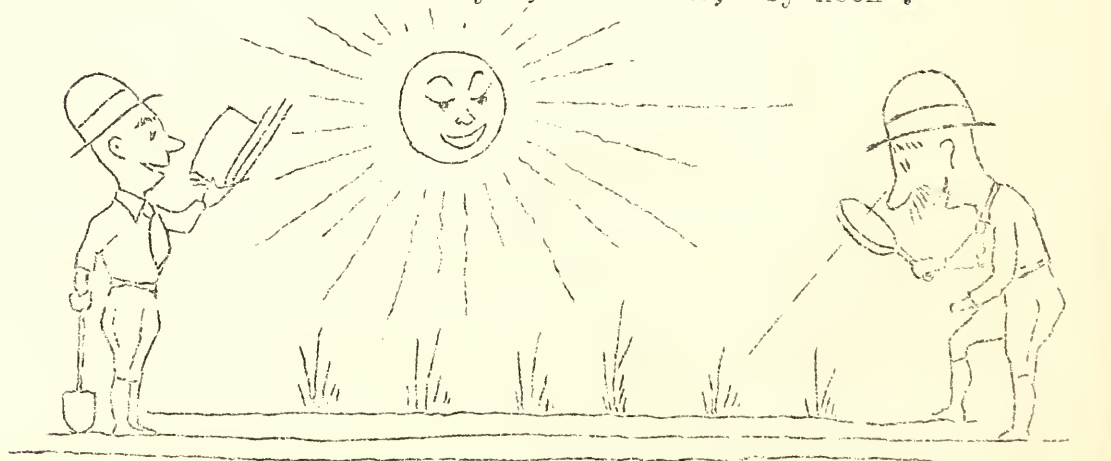
When 'twas cleared, plowed and corned a few years
 And no longer would yield a good stand,
 He'd clear up some more of those fertile hillsides,
 And raise corn to "just beat the band."

Well, this process went on for ages
 Farms were handed from father to son,
 And the land that was wooded and fertile
 Is all washed up, it's usefulness done.

Now we've got no new land to turn to,
 That vanished a long time ago;
 And all that we get for our hard days of toil,
 Is poverty, heartache, and woe.

So, if you've got a good plan that'll help us
 I'm certain we'll help carry it out
 For I've heered you scil conservin fellers
 Surely know what you're about.

If, as you prophesy, in the future
 We'll see timothy up to our neck
 Due to fertilize, lime and rotation,
 Then we're for you, unanimous, "by heck".



THE FORMATION OF SOILS

The formation of our soils begins with the decay or breaking down of rock. The forces involved have, for convenience, been classified under two main heads, mechanical and chemical.

We are all familiar with the tremendous pressure exerted by freezing water. Water seeps into the crevices of rocks, freezes and causes them to crack and crumble. Wide and rapid changes of temperature also play a very important part in the weathering of rocks. The minerals which go to make up the rock have different rates of expansion and the heating and cooling of the rock causes the minerals to pull apart leaving cracks. Into these cracks water and the roots of plants go, breaking the rock down into smaller particles.

While the mechanical agencies are busy tearing down the rock mass, the chemical agencies are also active. Water, oxygen and carbon dioxide are especially important in their action. Water carrying materials in solution dissolves the "cement" of rocks causing them to crumble. Oxygen changes both the bulk and the appearance of minerals. Carbon dioxide in the ground water is a very effective solvent, removing from the soil much of the lime and increasing the acidity.

The agencies mentioned above and many others must be active for thousands of years before a soil mass is formed. Even then the soil material is constantly being changed, soil particles are made smaller and complex compounds are reduced to simpler ones. Water carries the smaller particles into the subsoil where they accumulate causing the subsoil to be "heavier" than the topsoil.

The addition of organic matter to the soil material began with the decay of the first lichen and moss that grow on the rocks. This continued for centuries and as the organic matter increased the rock material was further weathered. These conditions paved the way for a succession of higher plants. The beneficial effects of organic matter to our mineral soils are so numerous that its importance cannot be over-emphasized. Absorption of water, production of ammonia and greater porosity of the soil are only a few of the many ways that organic matter influences the soil. Organic matter is the most active part of the soil, not only speeding up many chemical changes in the soil, but undergoing rapid decomposition itself. When we consider that most of the organic matter is concentrated in the topsoil and that our upland soils probably contain less than three percent of this valuable material, we begin to realize the necessity for saving what we have. But it takes more than organic matter and weathered rock material to make a true soil.

The weathered rock material acts as a base or framework for the rest of the soil. It is also the source of some plant nutrients. The amount depending upon the rate of weathering, the percent in the parent rock and the leaching that takes place. Much of the organic matter is changed to humus and, with the very fine mineral matter of the soil, makes up the colloidal portion of the soil. Mixed with the

colloids and throughout the soil are numerous forms of plant and animal life. They all play their part and on dying add to the humus content of the soil. Through this soil mass circulates the soil water and air in constantly changing amounts.

All these and more go to make up a soil. We should remember that the soil is the farmer's greatest asset and the basis of agriculture.

* * * * *

CONTEST RULES FOR FARM WOODLOT DEMONSTRATION FIELD DAYS

Cross-cut Sawing

1. Each team to be made up of two men.
2. Members of teams may furnish their own saw, or use one provided by the Soil Conservation Service.
3. Each team will be permitted to saw only once. However, a man who has competed once may compete again provided he selects a different partner.
4. The team requiring the shortest period of time to saw thru the log shall be declared winner of the contest.
5. The contest is not open to Soil Conservation Service employees.

Wood Chopping

1. Each competitor may furnish his own axe, or use one furnished by the Soil Conservation Service.
2. Each competitor will be allowed to chop thru only one log.
3. Not more than two men shall chop simultaneously.
4. The competitor requiring the shortest period of time to chop thru the log shall be declared winner of the contest.
5. This contest is not open to Soil Conservation Service employees.

Timber Marking Contest

1. Each contestant will be provided with a blank form on which to note whether certain trees are to be cut, and the reasons for his decision.
2. Trees to be judged shall be selected by competent foresters, and their decision shall be final.
3. The contestant turning in the best paper, in the opinion of the judges, shall be declared winner.
4. This contest is not open to Soil Conservation Service employees.

CROP ROTATIONS
(Continued from last issue)

WHEN WORKING OUT CROP ROTATIONS CONSIDER:

1. The needs of the farmer should always be considered in working out a crop rotation. If the farmer is a livestock farmer, he will necessarily want to produce a large percentage of legume hays. He will need to produce winter feed sufficient to tie-in and balance with the pasture land on his farm. If the farmer is a grower of a large percentage of cash crops, such things as winter cover and green manure crops need to be taken into consideration.
2. The acres of cultivated land on the farm will have to be taken into consideration in working out the crop rotation so as to provide for the farmer's needs and, at the same time, take proper care of the soil. If the acreage of cultivated land is small in proportion to pasture and livestock, it will necessitate a more intensive type of cropping than would be needed if the percentage of cultivated land was relatively large.
3. The type of soil is an important factor in working out crop rotations. Some types of soil being very fertile while others are relatively non-productive. Some types of soil being very erosive while others do not tend to erode so easily.
4. The degree of erosion is a deciding factor in a great number of cases as to what shall be grown in a particular field. For instance, where severe erosion has taken place, farmers have found that such crops as alfalfa, corn, red clover, etc., will either not grow or will not make sufficient yields to justify the expense of seeding. In this particular case, a farmer will probably want to either lime and fertilize the soil to increase this production, or plant it in some crop that will grow on poor eroded soils deficient in lime,
5. The slope is a very important point to keep in mind when working out a crop rotation. Cultivated crops should, as far as possible, be kept from the steeper slopes and confined, as much as possible, to the level land or more gentle slopes. Where winter feed is a limiting factor, it is entirely possible to work out a crop rotation with small grain and hay crops without the use of a cultivated crop. Where there is a very small amount of level land, or land that is not excessively steep, it is possible to use this limited amount of level land for more intensive production of cultivated crops such as corn. For instance, it would be better to use the small amount of level bottom land for corn each year than it would be to grow the corn on the steeper slopes and use the bottom land three years out of four for the production of hay or small grain. However, it is well to keep in mind that where such practice is used for the production of corn a winter cover crop is absolutely necessary to control erosion, maintain the productivity of the soil and for the securing of justifiable yields.

6. The degree of acidity and the soil fertility plays a very important part in any crop rotation. That is, where the soil is deficient in lime and fertility, it would not be wise to seed a lime loving plant, requiring large amounts of plant food such as alfalfa, red clover, barley, etc, unless lime and fertilizer can be added. It would also be unwise to attempt to grow potatoes on land deficient in plant food and low in organic matter. Each crop has its special requirement and they should be taken into consideration in planning crop rotations.

7. The practice of strip cropping is one of the points to consider when cropping is to be done on land that is so steep as to permit erosion where the entire field is planted to a cultivated crop at one time. In order to secure balanced crop production, it will be necessary to keep in mind the size of the strips, number, etc., in order to be certain of securing the proper amounts of each desired feeds year after year. The width of the strip will depend upon the steepness of the slope. A good plan to follow is to have a strip for every seven feet rise in elevation.

8. The winter cover crops should always be kept in mind in working out any type of crop rotation where otherwise the land would be kept bare over the winter. It is a common practice to use corn stubble land for the production of oats, the corn being removed in the fall and the ground remaining barren over the winter. Land left barren over the winter permits severe erosion, the leaching of valuable plant food from the soil, and the loss of organic matter obtained from a winter cover crop.

(Continued in the next issue.)

* * * * *

Save the Soil, Save Crop Production, Save Civilization.

* * * * *

REASONS FOR PLANTING BLACK WALNUT

- (1) The wood of black walnut is very valuable.
- (2) The black walnut comes second only to black locust as an erosion control tree in this vicinity.
- (3) Where walnuts grow there is nearly always a good sod, which make it desirable for planting on pasture land.
- (4) The nuts from the black walnut tree are valuable, both for home use and market.
- (5) The black walnut is a native tree to this part of West Virginia and is definitely known to be adapted to local conditions.

WILDLIFE POSSIBILITIES IN WEST VIRGINIA

(From an address by Dr. C. F. McClintic at the Soil Conservation Service Seminar meeting February 14, 1936.)

In past years we have, by clean farming practices and unwise cultivation, reduced our wildlife feed and cover. We are now faced with the possibility of bringing many birds and animals to total extinction just as we have done to the passenger pigeon which once thrived over a large part of the United States.

Unlike soil, coal and minerals, wildlife is a renewable resource which by slight changes in our present system of farming may be increased many times. Leaving shrubs along fence rows, planting small patches of grain and allowing them to be unharvested, protecting woodland from grazing, and artificial feeding in extreme weather conditions, are some of the many ways in which we may help our wild friends to live and increase.

Dr. McClintic also stated that wildlife is beneficial both to the farmer and city dweller. It is estimated that annually birds destroy insects, which if allowed to live, would do many million dollars worth of damage. Ringneck pheasants have been known to destroy as many as 300 grasshoppers per day. When we consider that each year insects do over two billions of dollars worth of damage in the United States, is it not economical to do everything possible that will increase the number of birds to help destroy these thieves of American Agriculture?

In some cases, farmers have turned their game birds and animals into a direct cash crop by selling shooting rights to sportsmen. The change is made either by the day or by the bird and sportsmen are always willing to pay this fee in exchange for good hunting. Naturally hunting rights should be limited and care should be taken that enough birds are left for the next year's breeding stock.

Dr. McClintic further stated that good hunting increases the tourist business of a state or community. This, in a state such as West Virginia, which is richly endowed in natural ruggedness and beauty, and industry, could soon be developed into a large and profitable business by bettering our hunting conditions.

As brought out by Dr. McClintic, the renewing of our supply of wildlife rests almost entirely with the farmers who control the greater part of the land. By providing food and covers for game birds and animals and regulating the amount of kill, the farmer may materially increase the amount of game.

Dr. McClintic states, the farmer in carrying out this program benefits by gaining help in combating his insect enemies and has a potential source of revenue from hunting.

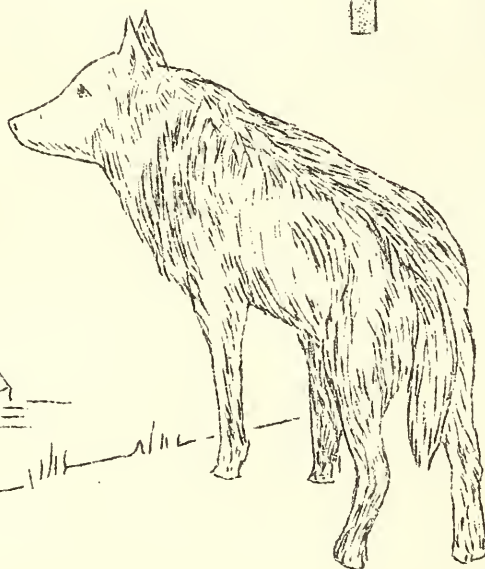
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THE
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